

OLYMPIC COAST  
NATIONAL MARINE SANCTUARY  
Meeting Minutes

OCNMS Advisory Council Meeting  
July 15, 2016

WA Department of Natural Resources  
Forks, WA

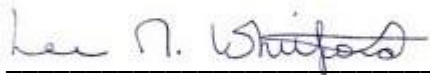
Olympic Coast National Marine Sanctuary  
NOAA, Office of National Marine Sanctuaries  
115 E. Railroad Avenue, Suite 301  
Port Angeles, WA 98362-2925

Reviewed by OCNMS Superintendent:



Carol Bernthal, Superintendent

Approved by AC Chair:



Lee Whitford, Chair

**Advisory Council (AC) Members/Alternates in Attendance:** Lee Whitford (Education, Chair), John Veentjer (Marine Industry, Secretary), Roy Morris (Citizen at Large), Jan Newton (Research), Lora Leschner (Conservation), Steve Shively (Tourism/Economic Development), Tom Burlingame (Fishing), Casey Dennehy (Marine Resources Committee), Frank Gordon (Grays Harbor County), David Hudson (Hoh Tribe), Steve Joner (Makah Tribe), Jennifer Hagen (Quileute Tribe), Captain Brian Gilda (USCG), John Stadler (NOAA-NMFS), Mike Barton (Education alternate), Rich Osborne (Marine Resources Committee alternate), Joe Gilbertson (Hoh Tribe alternate)

**Presenters and Others in Attendance:** Dr. Lara Hansen (EcoAdapt), Tami Pokorny (Jefferson County Environmental Health), Chad Bowechop (Makah Tribe), Aaron Parker (Makah Tribe), Courtney Winck (Makah Tribe), Frank Hanson (ONRC)

**NOAA/OCNMS Staff in Attendance:** Carol Bernthal, George Galasso, Liam Antrim, Kevin Grant, Karlyn Langjahr (OCNMS), Jonathan Malindine (U.C. Santa Barbara Sociocultural Anthropology Ph.D. candidate and visiting scholar), Gabe Almario (NOAA Office of Education Hollings Scholar)

Drew Rosanbalm, WDNR Assistant Regional Manager for Olympic Region, welcomed council members to the Forks Department of Natural Resources and U.S. Forest Service office. DNR Olympic Region (includes Jefferson, Clallam and North Grays Harbor Counties), manages approximately 370,000 acres and 2,600 miles of road systems. Their timber management and engineering programs, including road maintenance and management planning, are quite active.

Chair Lee Whitford called the meeting to order and reviewed the goals and purpose of the Advisory Council per its Charter.

**Adopt Agenda** – The draft agenda was adopted without changes. ***It was passed by full AC member consensus.***

#### **Internal Affairs:**

**Approval of May 2016 SAC Meeting Minutes** – Two edits were suggested on meeting notes. ***Steve Shively motioned to approve the meeting minutes with changes and Rich Osborne seconded. There was no further discussion and motion passed by full AC member consensus.***

**Elect New SAC Executive Committee Vice-Chair**– Bob Boekelheide was nominated to take over as Vice Chair due to Heather Reed, WDFW, former Vice Chair, stepping off the Advisory Council. Bob agreed to take over through the remainder of the calendar year although he will not be able to attend the July and September meetings. ***Roy Morris motioned to approve Bob Boekelheide as the new Vice-Chair, and Steve Joner seconded. There was no further discussion and motion passed by full AC member consensus.***

**SAC Charter Renewal Process** –The Olympic Coast National Marine Sanctuary Advisory Council's Charter is up for renewal. The SAC Executive Committee discussed initial ideas which

will be forwarded to a Subcommittee for further review and propose changes for an updated SAC Charter. At this point, we do not anticipate major changes since the 2011 Charter included more major revisions. Initial Executive Committee suggestions included: 1) allowing alternate position member of a seat to serve as an officer on the Executive Committee; 2) allow a council member to serve as a reviewer on the Executive Committee beyond just the role of assisting in selecting new candidates for open seats; 3) setting the Executive Officer election date for the March meeting (instead of January) in order to allow for enough time for headquarters to vet council members selected for a seat. Roy Morris and John Veentjer volunteered to join the Charter Renewal Subcommittee. Other members are welcome to join, if interested contact Karlyn.

### **Information Items:**

**Ocean Acidification Sentinel Site Workshop**— Lee Whitford, Chair of Ocean Acidification Sentinel Site (OASeS) Working Group, announced that the sanctuary is undertaking a major step in creating a sentinel site for ocean acidification for the Olympic Coast by hosting a workshop September 12-13. OCNMS staff is working with colleagues at headquarters and NOAA's Ocean Acidification Program (OAP) to draft an agenda for the workshop. The overall goal of the OASeS workshop is to explore the scope and potential functions of an Olympic Coast ocean acidification (OA) sentinel site, identify relevant partnerships and collaborations to support it, determine priority information and products from science, communication and education, and discuss ONMS's role relative to an OA sentinel site. After the workshop, OCNMS and partners will create a team to guide and support its establishment, define its scope and core functions, continue existing and establish new partnerships to support the needs of local, regional and national organizations, and development and implement an OASeS work plan for FY 2017. Kevin Grant, OCNMS added that both ONMS and NOAA's OAP are interested in increasing attention and resources on ocean acidification on the outer coast. Another desired outcome is to become a model that could be transferred to other locations interested in establishing a sentinel site for OA. He explained that NOAA already has five sentinel sites for sea level rise and that we can identify the pieces needed to have an OA sentinel site. Workshop invitees represent local, regional and national experts in OA research, monitoring, education and communication who have experience and a vested interest in this topic. A report on the workshop will be given at the November SAC meeting.

**OCNMS Summer 2016 Research Activity** – Liam Antrim, OCNMS Acting Research Coordinator, presented highlights of the sanctuary's summer research activities. Based on habitat mapping priorities defined through Washington's Marine Spatial Planning, seafloor habitat mapping in Quinault Canyon was conducted using multibeam sonar from the NOAA ship *Rainier* in April-May 2016. *Rainier* surveyed for bathymetry, backscatter and water column over 205 square nautical miles of deep canyon habitat. OCNMS is coordinating effort in 2017 of this priority area, which will characterize an additional 173 square nautical miles of shelf habitat.

In early June, Ocean Exploration Trust's EV *Nautilus* conducted the Cascadia Margin cruise between the Canadian border and San Francisco. The *Nautilus* is equipped with 2 remotely

operated vehicles (ROVs), multibeam sonar, a sub-bottom profiler, and has the capacity to live stream for outreach and education. Gas-hydrate and methane seeps were discovered in the Quileute and Quinault Canyons ([www.nautiluslive.org/expedition/2016](http://www.nautiluslive.org/expedition/2016)). Also, one ROV dive was on the shipwreck *SS Coast Trader*, a World War II freighter sunk in US waters ([www.nautiluslive.org/video/2016/06/05/ss-coast-trader-wreck-survey](http://www.nautiluslive.org/video/2016/06/05/ss-coast-trader-wreck-survey)). Another ROV dive provided the first images of the seafloor of the Quinault Canyon. For local outreach, E/V *Nautilus* transmitted from their ship to Taholah High School students on shore on Quinault Indian Nation on World Ocean Day to enable students an interactive experience with research crew. OCNMS will have approximately eight days of ship time in 2017 to continue exploring the Quinault Canyon area.

2016 is the sixteenth year of deployment for OCNMS coastal moorings, and the fourth year of collecting temperature data over winter months. While working on moorings, waters are sampled for harmful algal blooms (HABs) analysis at Quileute Natural Resources laboratory.

A West Coast ocean acidification (OA) cruise between Baja to British Columbia in May-June integrated sampling of OA, temperature, oxygen, HABs, and zooplankton (see [www.pmel.noaa.gov/co2/story/WCOA2016+Blog](http://www.pmel.noaa.gov/co2/story/WCOA2016+Blog)). OCNMS completed whole water sampling at stations between cruise stations and Olympic National Park intertidal monitoring stations for OA. In addition, OCNMS collaborated with Dr. Cathy Pfister, University of Chicago, and WA Dept. of Natural Resources to study kelp forests and their dynamics under climate change and how kelp may serve as refuge for calcifying species.

In 2016, OCNMS continued rocky intertidal monitoring on Makah and Quinault lands; assisted with the annual sea otter census organized by USFWS and WDFW; resumed pelagic seabird surveys from the RV *Tatoosh*; and collaborated with Northwest Fisheries Science Center on subtidal surveys of kelp beds for the second consecutive year. Liam's presentation can be found online at: [http://olympiccoast.noaa.gov/involved/sac/update\\_research\\_7\\_15\\_16.pdf](http://olympiccoast.noaa.gov/involved/sac/update_research_7_15_16.pdf).

**Public Comment**– None at this time.

**Commission for Environmental Cooperation's Rapid Vulnerability Assessment Project for Climate Change**– Dr. Lara Hansen, Chief Scientist and Executive Director and EcoAdapt, presented the Commission for Environmental Cooperating (CEC) Marine Protected Area (MPA) Rapid Vulnerability Assessment Project, which has recently begun. The project will be tested at six sites: two in Canada, two in the United States, and two in Mexico. One of the proposed pilot projects will be the Pacific Northwest.

Vulnerability can involve three types of adaptation options: resistance, resilience and response. In the Greater Farallones National Marine Sanctuary (GFNMS), Lara and team used a climate-smart adaptation process, which included an initial phase of identifying conservation targets (species, habitats, ecosystems), and then assessing the vulnerability to climate change (sensitivity, exposure and adaptive capacity). The next phase entailed identifying and the management options that would ultimately be implemented. They used exposure and

sensitivity to yield potential impact on a focal resource, and then factored in its adaptive capacity to determine vulnerability. EcoAdapt addressed uncertainties with quantitative scores, background literatures, peer review and confidence evaluations. The analysis is described in the report, entitled “*Climate Change Vulnerability for the North-central California Coast and Ocean.*” Recommendations were presented to the GFNMS Advisory Council, which added additional ideas to the list before approval by the Sanctuary Superintendent. It was then shared with all partners and council constituents.

Overall, three major concerns emerged for GFNMS: sea level rise, changing hydrology and coastal erosion. The working group also developed 78 strategies with adaptation actions planned spatially and temporally. She gave examples of ideas that emerged for spatial and temporal measures, along with their aspects of resistance, response and resilience. Lara then displayed an adaptation ladder of engagement, ranging from awareness all the way up to sharing in 7 steps.

Laura described proposed process of conducting the Rapid Vulnerability Assessment, using examples from the exercises used for GFNMS. A matrix is constructed using available science and local knowledge and designed to be useful for MPA managers. The adaptation strategy development will rank the adaptive capacity, whereby more vulnerable stresses have a list of adaptation strategies to respond to that stress. A resource called CAKE (Climate Adaptation Knowledge Exchange, [www.cakex.org](http://www.cakex.org)) shares case studies of adaptation, along with various tools and online library. Lara highlighted the need to have a long-term solution starting point and to keep a holistic perspective.

The next steps for the PNW pilot project is to keep testing and flesh out the draft to be used in a workshop. From there they will complete the first version of the product and run a webinar to train MPA managers. After a series of workshops, they will be guiding sites through the process. She left copies of the climate documents produced for central California and can be contacted at [Lara@EcoAdapt.org](mailto:Lara@EcoAdapt.org).

Lara’s presentation can be found online at:  
[http://olympiccoast.noaa.gov/involved/sac/cec\\_rapid\\_vulnerability\\_assessment\\_hansen.pdf](http://olympiccoast.noaa.gov/involved/sac/cec_rapid_vulnerability_assessment_hansen.pdf).

**Area To Be Avoided from U.S. Coast Guard Perspective** – Captain Brian Gilda, U.S. Coast Guard Thirteenth District, provided an overview of OCNMS’s Area to be Avoided (ATBA) from the Coast Guard perspective. The ATBA was designated to reduce the risks of marine casualty and resulting pollution and damage to the Olympic Coast. All ships and barges 400 gross tons or more, and other large vessels carrying hazardous or petroleum-based products, avoid this designated area within the sanctuary. The United Nations’ International Maritime Organization (IMO) first designated the ATBA in 1995, which was expanded in 2002 and modified in 2012. By having ships stay offshore, it allows more response time in the event a potentially devastating incident occurs, such as ship engine failure. Up until last year, the Canadians had a Marine Traffic Communication System (MTCS) located in Tofino, with a range of 70 nautical miles (nm) that covered the northern end of OCNMS. The U.S. Coast Guard’s Cape Flattery radar could

reach out 30 nm and across the Strait of Juan de Fuca up to Ucluelet on Vancouver Island. After the Canadian consolidation, the new MCTS location is in Prince Rupert, British Columbia. Awareness of the ATBA is very strong and that voluntary compliance is extremely high, signifying that vessels understand the safety and economic implications of abiding with the voluntary area. Any vessel that is observed within the ATBA receives a joint letter from the U.S. Coast Guard Puget Sound Sector Commander and OCNMS Superintendent. Vessels carry an Automatic Identification System (AIS) to identify and locate vessels by electronically exchanging data with other nearby ships, stations and satellites, and this is how compliance and infractions are determined. Brian mentioned other coastal collaboration with OCNMS, such as participating in helicopter removal of marine debris in remote locations.

Brian's presentation can be found online at:

[http://olympiccoast.noaa.gov/involved/sac/presentation\\_uscg\\_atba\\_gilda.pdf](http://olympiccoast.noaa.gov/involved/sac/presentation_uscg_atba_gilda.pdf).

**The OASSIS Education Project**– Lee Whitford spoke about the Ocean Acidification Study through Systems and Inquiry Science (OASSIS) project run by Port Townsend Marine Science Center (PTMSC) and Chimacum High School. This NOAA B-WET funded project highlights the application of ocean acidification science in education and outreach and developing new ways to reach youth on timely environmental issues. Lee served as the Interim Education Coordinator for PTMSC, and worked on the BWET funded project.

The overall goals were to increase understanding of ocean acidification (OA), increase interest in STEM (Science, Technology, Engineering and Mathematics) careers, inspire collective action toward climate change solutions, and integrate citizen science with education. In the development and implementation of this project, she and colleagues aimed to provide meaningful watershed experiences with a local focus. The framework they used for this program came from curriculum by Baliga Lab at Institute for Systems Biology (see [www.systemsbiology.org/people/faculty/baliga-lab/](http://www.systemsbiology.org/people/faculty/baliga-lab/)) using a system analysis approach and including modules on ecological networks and ocean acidification. Students learned about characteristics and sources of carbon dioxide (CO<sub>2</sub>), citizen science, and various STEM careers. Field trips included a tour of Taylor Shellfish Hatchery in Quilcene, NOAA's fish research laboratory in Mukilteo and Port Townsend Marine Science Center. Students designed their own investigations and experiments on CO<sub>2</sub> and OA. The project culminated with a student summit, where students showcased the posters on their experiments and results. For a copy of the summative evaluation contact Lee at [leewhitford1@gmail.com](mailto:leewhitford1@gmail.com).

Lee's presentation can be found online at:

[http://olympiccoast.noaa.gov/involved/sac/presentation\\_oassis\\_ptmsc\\_whitford.pdf](http://olympiccoast.noaa.gov/involved/sac/presentation_oassis_ptmsc_whitford.pdf).

**Lower Columbia River Landscape Conservation Blueprint**– Lora Leschner, Pacific Birds Habitat Joint Ventures (PBHJV), briefed the council on a project that they are doing in cooperation with the North Pacific Landscape Conservation Cooperative. The Joint Venture is a U.S. Fish and Wildlife Service program that arose out of a decline in waterfowl population a few decades ago. There are approximately 34 Habitat Joint Ventures, and some of those overlap with species

(e.g. Sea duck) Joint Ventures. They convene and support people working to conserve bird habitat through partnerships and networks. Over time, the approach has evolved to a more holistic approach, with the joint ventures working on a much broader regional level. PBHJV encompasses northern California, Oregon, Washington, British Columbia, Alaska, Hawai'i and the Federated States of Micronesia. Current priorities include Hawai'i wetlands and waterbirds, Pacific Northwest oak and prairie conservation and coastal wetlands.

The Pacific Northwest Coast Landscape Conservation Divide (LCD) takes place in the Lower Columbia River and outer coasts of Oregon and Washington involving federal, state, local agencies, tribal nations, non-profit and educational organizations, industry, and the public. They are working to develop a landscape conservation blueprint that identifies valued resources, assesses future stresses, and guides collective efforts to achieve shared outcomes. They are currently synthesizing partners' conservation priorities to identify targets, ecological attributes of those targets and stressors. For more information about this project, contact Sara Evans-Peters at [sara@pacificbirds.org](mailto:sara@pacificbirds.org) or visit <http://columbiacoastblueprint.org>

Lora's presentation can be found online at:  
[http://olympiccoast.noaa.gov/involved/sac/lower\\_columbiariver\\_landscape\\_pbhvj\\_leschner.pdf](http://olympiccoast.noaa.gov/involved/sac/lower_columbiariver_landscape_pbhvj_leschner.pdf).

**Public Comment**– None at this time.

**Superintendent's Report** – Carol referred council members to the July 2016 Office Report for updates on sanctuary activity in the past two months, which can also be found online at: [http://olympiccoast.noaa.gov/involved/sac/officereport\\_july\\_2016.pdf](http://olympiccoast.noaa.gov/involved/sac/officereport_july_2016.pdf). She asked council members for feedback on ways the sanctuary can make the report more useful, which is organized around the six major categories of OCNMS Management Plan. Council members wanted to keep the Office Report comprehensive and agreed it was useful, but suggested that it be provided digitally only.

Carol highlighted the following activities from the past two months:

1. Carol and John Armor, ONMS Acting Director, OCNMS attended the 50<sup>th</sup> anniversary celebration of the Ozette archaeological dig, hosted by the Makah Cultural and Research Center.
2. George briefed the advisory council on the development of a Cultural Resource Management Plan. This summer OCNMS hosted a National Science Foundation scholar and Social Anthropology Ph.D. student, Jonathan Malindine, and Hollings Scholar, Gabe Amario, to assist with on the project. They met with Department of Archaeology and Historic Preservation on sanctuary management of cultural and historic resources. These efforts help address two sections of the National Historic Preservation Act: Section 106 regarding federal government action impacts cultural/historic property, and Section 110 which involves the responsibility to inventory resources that are found within the sanctuary.
3. Get Into Your Sanctuary (GIYS) events, designed to highlight the national goal of responsible recreation in sanctuary sites for public understanding, appreciation and



enjoyment, were a success. OCNMS kicked off our events with a showing of Florian Graner's film on the sanctuary at Olympic National Park's (ONP) Visitor Center, with Florian describing how he made the film and the challenges of being an underwater film maker. An educational paper placemat was developed for participating Olympic Culinary Loop restaurants along the coast. Two photography workshops were held, including a session led by Meredith Parker, Makah Tribe for youth at Cape Flattery and Hobuck Beach. OCNMS partnered with Olympic National Park to lead an educational beach walk and photography workshop at Ruby Beach. Nationally, over 8,000 visitors were engaged across all 14 sites, with a national photo contest, to increase awareness of the national marine sanctuary system. George delivered a presentation to the public by at Olympic Natural Resources Center in Forks during their series of "Evening Talks". The presentation was well attended.

4. ONMS videographers will be visiting OCNMS to create basic education and outreach materials. The goal is to have two video products, one highlighting ocean acidification and what the sanctuary is trying to do with a sentinel site program and the other showcasing recreational opportunities in the sanctuary.
5. OCNMS is still working to finalize the selection of a Research Coordinator, and hopes to fill that position very soon.

#### **Member Reports and Future Agenda Topics**

- Jan Newton shared an update on the NANOOS Cha'ba buoy near La Push, which lost its tower either due to ship collision or bull sea lion strike. They are working to recover it. Their NEMO buoy was collecting and relaying real time data on harmful algal blooms and phytoplankton species from 10 meter depth. If you visit [www.nanoos.org](http://www.nanoos.org) you can find new videos of its deployment with a link to their data. With the Quileute Tribal School they are conducting outreach using data. She also thanked George for assistance looking up the AIS when Cha'ba buoy lost its power even though they were unable to identify the ship. NANOOS received another 5 year award. The University of Washington scientists are proposing to NSF a long-term research ecological site which would feature additional data and outreach.
- John Veentjer shared that the next Harbor Safety Committee meeting will take place on August 3 and will be followed by a working group meeting to plan for WDOE's safety workshop in October. They are still working on the Vessel Traffic Risk Assessment for 2015, and project for more vessel traffic in the coming 15 years, with largest growth expected in Canada.
- Mike Barton suggested a future presentation addressing the ramifications of the possible redesign and joint facility for Feiro Marine Life Center and OCNMS. Carol will think about the appropriate timing for that topic.
- Captain Brian Gilda announced the retirement of Rear Admiral Gromlick's retirement and replacement by Rear Admiral Mark Butt. Rear Admiral Butt, in his new role, met with OCNMS leadership recently in Port Angeles.
- Steve Joner again participated in the Capitol Hill Ocean Week fish fry, providing and cooking salmon and black cod from Neah Bay. He touched on the huge success of efforts to rebuild the Canary rockfish. They recently concluded the process for the 2017-18 fisheries and tribal harvest numbers are much higher now. In 2000-01 there were 8 species of Rockfish listed, and



now 4 of those 8 have been rebuilt (Canary and Widow rockfishes rebuilt, with Dark blotch to be rebuilt next year and Bocaccio the year after).

- Casey Dennehy announced the Marine Resources Committee Summit in Long Beach on October 20-22 with topics covering shoreline master plans, marine spatial planning, and coastal erosion. Surfrider Foundation's is continuing its Leadership Academy, and noted that Aaron Parker and Jennifer Hagen are participating.
- Tom Burlingame announced that they are salmon fishing now, both commercially and recreationally. Regarding the Canary rockfish, the recreational fishing community recommended against retention of Canary rockfish this year, due to the difficulty in correctly identifying the species.
- Steve Shively mentioned the UK mega familiarization tourism trip for two days on the Olympic Peninsula. OCNMS staff participated on a whale watching trip on Puget Sound Express as a chance to interact with UK tourism representatives. Through May, Jefferson County tourism was up 24% and they are not the only ones experiencing positive signs of increased visitation to the peninsula.
- John Stadler shared that the Pacific Fishery Management Council meeting in April resulted in the reduction of alternatives needed to analyze from 20 to 5 regarding groundfish essential fish habitat proposals. They were aiming to have analytical documents by September, but are now targeting November. They did eliminate any consideration of changes to the EFH Conservation Areas or trawl Rockfish Conservation area in the usual and accustomed fishing areas of the Coastal Treaty Tribes. They are working with the Tribes and providing them with analyses of proposed changes within tribal waters.
- Joe Gilbertson stated that some of the sanctuary's work is helpful, including habitat mapping. They look forward to information that will be helpful to Hoh Tribe such as fishing vessel traffic and vessel patterns.
- Roy Morris acknowledged OCNMS's participation in marine debris related efforts supporting Washington CoastSavers. He recently returned from Japan where he and partners approached the government to have a G7 Summit work product come out with a resolution for total recycling and no dumping within the next 10 or 20 years. Roy will share this information with Karlyn to help distribute it widely among council members and constituents. The International Coastal Cleanup along Washington's coast takes place on September 17, followed by a "Salmon Feed, Poetry Read" event to thank participating volunteers and voluntourists at 4pm in Tillicum Park, Forks. He is working to expand efforts globally, including Chile and Cuba.
- Jennifer Hagen reported that the Quileute plankton monitoring program is not detecting domoic acid for shellfish, so the shellfish fishery is open. She recommended a future agenda topic of a presentation with informed discussion on the application by the Whiting fishery industry for a permit to discharge in sanctuary waters, along with other waters in Oregon and Washington.

The next OCNMS Advisory Council meeting will take place on **Friday, September 23<sup>rd</sup>** in Seattle on the University of Washington campus. The meeting was adjourned.